

AMENDMENTS TO THE CLAIMS

Claims 1-18 (Cancelled)

19. (New) An interface apparatus for a first structured document, comprising:

a first processor for

receiving a processing request from a application program, as a processing requester, for a first structured document, and

performing a lexical analysis of the first structured document to obtain a series of events related to the first structured document in order;

store means for

associating the series of events, as event set information, with the first structured document,

storing the event set information into a cache; and

first notification means for notifying the first application program of the series of events related to the first structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

20. (New) The interface apparatus for the first structured document according to claim 19, further comprising:

a second processor for performing a lexical analysis of a second structured document having event set information not in the cache, and

second notification means for notifying a second application program as a processing requester of a series of events relating to the second structured document in order, wherein

the store means associates the series of events, notified to the second application program by the second notification means as the event set information, with the second structured document to store the information into the cache.

21. (New) An interface apparatus for a structured document requested by an application program as a processing requestor, comprising:

first processing means for

reading and performing a lexical analysis on the structured document,

notifying the application program of a series of events relating to the structured document in order,

associating the notified series of events as event set information with the structured document, and

storing the event set of information into the cache;

second processing means for

reading the event set information of the cache with respect to the structured document, and

notifying the application program of the series of events relating to the event set information in order; and

control means for determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to:

the first processing means upon the event set information not being in the cache,
or

the second processing means upon the event set information being in the cache.

22. (New) The interface apparatus for the structured document according to claim 21,
wherein

the control means determines that the event set information is not in the cache with
respect to the structured document upon

the event set information relating to a structured document has a same file name
as that of the structured document and exists in the cache, and

the event set information relates to a prior structured document existing prior to
an update of the structured document.

23. (New) The interface apparatus for the structured document according to claim 22,
wherein

the control means is a parser notified from the application program of a request of the
structured document by URI.

24. (New) The interface apparatus for the structured document according to claim 22,
wherein

the first and second processing means are respectively mounted in corresponding parsers,
and

the control means is mounted in the application program.

25. (New) A processing method for a structured document, the method comprising:

receiving a processing request from an application program, as a processing requesting, for a series of events relating to the structured document in order with respect to the structured document;

performing a lexical analysis of the structured document to obtain the series of events related to the structured document in order;

associating the series of events, as event set information, with the structured document to store the event set information into a cache; and

notifying the application program of the series of events related to the structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

26. (New) The processing method for the structured document according to claim 25, further comprising:

reading a second structured document having event set information not in the cache to perform lexical analysis of the second structured document to obtain a second series of events related to the second structured document in order;

notifying a second application program, as a processing requester, of the second series of events related to the second structured document in order, and

associating the second series of events, as event set information, with the second structured document to store the event set information into the cache.

27. (New) A processing method for a structured document requested by an application program as a processing requestor, comprising:

standard processing steps of

reading and performing a lexical analysis on the structured document,

notifying the application program of a series of events relating to the structured document in order,

associating the notified series of events as event set information with the structured document, and

storing the event set of information into the cache;

reduced processing steps of

reading the event set information of the cache with respect to the structured document, and

notifying the application program of the series of events relating to the event set information in order; and

determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to

the standard processing steps upon the event set information not being in the cache, or

the reduced processing steps upon the event set information being in the cache.

28. (New) The processing method for the structured document according to claim 27, wherein the control step comprises:

judging that there is not the event set information in the cache with respect to the structured document as the processing object, when it is judging whether or not there is the event set information of the structured document as the processing object in the cache and when the event set information relating to a structured document having the same file name as that of the structured document as the processing object exists in the cache but when the event set information relates to a structured document before update of the existing structured document.

29. (New) The processing method according to claim 28, wherein the determining step is performed in a parser notified from the application program of a request of the structured document by URI.

30. (New) The processing method according to claim 28, wherein the first and second processing steps are respectively performed in corresponding parsers, and the determining step is performed in the application program.

31. (New) A computer program product recorded on computer readable medium and having stored thereon a computer program comprising a routine set of instructions for causing one or more computers to execute:

receiving a processing request from an application program, as a processing requesting, for a series of events relating to a structured document in order with respect to the structured document;

performing a lexical analysis of the structured document to obtain the series of events related to the structured document in order;

associating the series of events, as event set information, with the structured document to store the event set information into a cache; and

notifying the application program of the series of events related to the structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

32. (New) The computer program product according to claim 31, further causing the one or more computers to execute:

reading a second structured document having event set information not in the cache to perform lexical analysis of the second structured document to obtain a second series of events related to the second structured document in order;

notifying a second application program, as a processing requester, of the second series of events related to the second structured document in order, and

associating the second series of events, as event set information, with the second structured document to store the event set information into the cache.

33. (New) A computer program product recorded on computer readable medium and having stored thereon a computer program comprising a routine set of instructions for a structured document requested by an application program as a processing requestor and causing one or more computers to execute:

standard processing steps of

- reading and performing a lexical analysis on the structured document,
- notifying the application program of a series of events relating to the structured document in order,
- associating the notified series of events as event set information with the structured document, and
- storing the event set of information into the cache;

reduced processing steps of

- reading the event set information of the cache with respect to the structured document, and
- notifying the application program of the series of events relating to the event set information in order; and
- determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to

- the standard processing steps upon the event set information not being in the cache, or
- the reduced processing steps upon the event set information being in the cache.

34. (New) The computer program product according to claim 33, wherein the control step comprises:

- judging that there is not the event set information in the cache with respect to the structured document as the processing object, when it is judging whether or not there is the event set information of the structured document as the processing object in the cache and when the

event set information relating to a structured document having the same file name as that of the structured document as the processing object exists in the cache but when the event set information relates to a structured document before update of the existing structured document.

35. (New) The computer program product according to claim 34, wherein the determining step is performed in a parser notified from the application program of a request of the structured document by URI.

36. (New) The computer program product according to claim 34, wherein the first and second processing steps are respectively performed in corresponding parsers, and the determining step is performed in the application program.